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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,678	12/18/2001	Georgina Sweeney	1713A1	3528

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PPG INDUSTRIES, INC.  
Intellectual Property Department  
One PPG Place  
Pittsburgh, PA 15272

EXAMINER

GODDARD, BRIAN D

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 10/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/023,678	Applicant(s) SWEENEY ET AL.	
	Examiner Brian Goddard	Art Unit 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,11-22,24-26 and 43-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,11-22,24-26 and 43-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*PD*

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28 July 2005 has been entered.

2. Claims 1, 3-8, 11-22, 24-26 and 43-47 are pending in this application. Claims 1, 16, 21 and 43 are independent claims. In the Amendment filed 28 July 2005, claims 1, 3, 5, 16, 21, 22 and 43 were amended. This action is non-final.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 3-8, 11-22, 24-26 and 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0007289 to Malin in view of U.S. Patent No. 6,516,239 to Madden et al.

Referring to claim 1, Malin discloses a method of determining the status of a vehicle undergoing repair substantially as claimed. See Figures 1-8 and the corresponding portions of the specification for this disclosure. Specifically, Malin

teaches a method of determining the status of a vehicle undergoing repair [See Fig. 1] comprising the steps of:

maintaining a computer database [725] containing a vehicle identifier [See ¶ 0045 and Figs. 3 & 7] for a vehicle undergoing repair and repair status information [See Figs. 1, 3, 7 & 9] for the vehicle undergoing repair, the vehicle identifier comprising a repair order number [See Fig. 3];

periodically updating the repair status information on the database by electronically transferring [See ¶ 0034, 0057-0058 & 0070-0072 and Steps 925-930 (shop personnel update repair status by electronically transferring status data to the shop database 725 via a shop terminal 720)] data on the status [repair status] of the vehicle undergoing repair to the computer database [725];

transferring [See Steps 925-930 (shop database 725 synchronized with platform server database 750)] the updated database information to a remote location [705];

searching [See Step 935] the information at the remote location [customer or third party searches for status information in platform server database 750] to locate the vehicle undergoing repair; and

identifying data on the status [requested status data is provided to the requester (See Steps 145 and 935)] of the vehicle undergoing repair.

Malin does not explicitly teach that the vehicle identifier comprises a vehicle identification number or a bar code as claimed. However, this is because Malin is only directly concerned with the tracking of individual repair orders and the generation of statistics therefrom. Madden discloses a system and method for tracking the status of a

vehicle undergoing assembly/repair, similar to that of Malin, wherein a computer database [208] containing a vehicle identifier [See Column 7, line 29 et seq.] for a vehicle undergoing repair and repair status information [See Abstract, Summary & all portions of specification] for the vehicle undergoing repair is maintained, the vehicle identifier comprising a vehicle identification number [VIN (See Column 7, line 29 et seq.; Column 9, line 8 et seq.; etc.)) as claimed. Madden further discloses reasons for using the VIN as an identifier for the vehicle, one being to track the repair history of the vehicle (See Abstract & Summary).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a vehicle identification number (VIN), such as in Madden, to Malin's database to obtain the invention as claimed. One would have been motivated to do so in order to efficiently track the entire repair history of the vehicle, in addition to tracking status of a single repair, as disclosed by Madden.

Referring to claim 3, the combination of Malin and Madden as applied to claim 1 above (hereafter 'Malin/Madden') teaches the method of claim 1, as above, wherein the remote location is a database [750<sup>1</sup>] accessible through a website [See Platform Server 740 and ¶ 0040 & 0071] as claimed.

Referring to claim 4, Malin/Madden teaches the method of claim 3, as above, further comprising electronically requesting [See Step 935] the status of the vehicle prior to said searching step [the database is searched for data that is requested] as claimed.

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<sup>1</sup> All citations refer to the Malin reference unless otherwise noted.

Referring to claims 5 and 6, Malin/Madden teaches the method of claim 1, as above, wherein the steps are performed on a global computer communications network [710 (e.g. the Internet)] as claimed.

Referring to claims 7 and 8, Malin/Madden teaches the method of claim 2, as above, wherein said transferring step comprises entering the status data on the vehicle status into a data transfer device [Shop Terminal(s) 720 (See also 220)] and transferring [See Figs. 1 & 9, particularly Step 930] the status data from the data transfer device [720] to the computer database [725], wherein the data transfer device is portable [See ¶ 0100] as claimed.

Referring to claims 11, Malin/Madden teaches the method of claim 1, as above, wherein the status data includes...[See Fig. 3] as claimed.

Referring to claim 12, Malin/Madden teaches the method of claim 11, wherein the vehicle undergoes repair steps ['tasks' based on the repair plan (See Figs. 1, 3 & 5-6)] corresponding to each of the information items (i)-(xx) of claim 11 [See Fig. 3 – the tasks in Malin's repair plan correspond exactly to those of items (i)-(xx) in claim 11] as claimed.

Referring to claim 13, Malin/Madden teaches the method of claim 12, as above, wherein said repair steps are performed substantially in the order of information items (i)-(xx) listed in claim 11. Malin's (as modified by Madden) repair tasks are not explicitly disclosed in the exact sequence as that listed in the claim. However, the exact order of this sequence is nothing more than design choice, as long as the end result is the same (which is true of Malin/Madden). That is, there is nothing unexpected or unobvious in

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performing the exact sequence as listed in the claim as opposed to the corresponding sequence as listed in Fig. 3 of Malin. Further, both Malin and Madden disclose that the tasks can be scheduled in any order, on a case-by-case basis depending on resources available and timing, to achieve the same end result. See Figs. 4-6 and the corresponding portions of Malin's specification, as well as the Abstract and Summary of Madden's specification, for this disclosure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to schedule the sequence of tasks in Malin/Madden to obtain the exact sequence of the claim, to maintain the premise of efficient repair disclosed in both, while still achieving the same end result.

Referring to claim 14, Malin/Madden teaches the method of claim 12, as above, wherein the status of the vehicle is provided to the owner of the vehicle [See Step 145, Figs. 7-8, and Steps 935-945] following...any one of the repair steps [See ¶¶ 0064, 0080-0081 & 0090] as claimed.

Referring to claim 15, Malin/Madden teaches the method of claim 14, as above, wherein the status of the vehicle is automatically provided [e.g. via electronic message (See Steps. 935 & 945 and Figs. 7-8)] to the owner of the vehicle as claimed.

Referring to claim 16, Malin/Madden discloses a method of tracking the repair process of a vehicle that is in a repair shop as claimed. See Figures 1-8 and the corresponding portions of Malin's specification for this disclosure. Malin/Madden teaches a method [See Figs. 1 & 9] of tracking the repair process of a vehicle that is in a repair shop, comprising the steps of:

periodically electronically transferring [See ¶ 0034 & 0057-0058 and Steps 925-930] data on the status of a plurality of vehicles undergoing repair [repair status] to a database [750] on a computer [705];

determining the length of time ['cycle time'] that the status data for each vehicle remains unchanged ['dead time'] via software on the computer [statistical analysis module (See Figs. 2, 7 & 8)];

identifying a vehicle for which the status data is unchanged beyond a predetermined length of time [See ¶ 0052 & 0074];

determining the extent that the status data is unchanged [See ¶ 0064 and Claims 41-43] beyond a predetermined length of time [task deadline]; and

sorting the vehicles for which the status data is unchanged beyond a predetermined length of time [Malin: See ¶ 0052, 0064 & 0074; Madden: See re-arrangement of vehicles and sort-order discussed throughout disclosure] by at least one vehicle identifier [See Madden's disclosure as cited in combination of claim 1 above] as claimed.

Referring to claim 17, Malin/Madden teaches the method of claim 16, as above, wherein the status data is transferred daily [See Figs. 1 & 9] as claimed.

Referring to claim 18, Malin/Madden teaches the method of claim 16, as above, wherein the status data includes... [See Fig. 3] as claimed.

Referring to claim 19, Malin/Madden teaches the method of claim 16, as above, wherein said electronically transferring step comprises entering the status data into a data transfer device [Shop Terminal 720 (See also 220)] and transferring [See Figs. 1 &



9, particularly Step 930] the data from the data transfer device [720] to a computer [705] as claimed.

Referring to claim 20, Malin/Madden teaches the method of claim 16, as above, wherein the database [750] stores an identifier for each vehicle [See ¶ 0045 and Figs. 3 & 7], the identifier being selected from the group consisting of vehicle make, vehicle model and vehicle year [See ¶ 0045] such that the software determines...[See discussion of claim 16 above] as claimed.

Referring to claim 21, Malin/Madden discloses the system for determining the status of a vehicle undergoing repair as claimed. See the discussions regarding claims 1, 3 and 7 above for the details of this disclosure.

Claim 22 is rejected on the same basis as claim 8, in light of the basis for claim 21. See the discussions regarding claims 1, 3, 7-8 and 21 above for the details of this disclosure.

Claim 24 is rejected on the same basis as claim 11, in light of the basis for claim 21. See the discussions regarding claims 1, 3, 7, 11 and 21 above for the details of this disclosure.

Claims 25-26 are rejected on the same basis as claims 12-13 respectively, in light of the basis for claim 24. See the discussions regarding claims 1, 3, 7, 11-13 and 24 above for the details of this disclosure.

Claims 43-47 are rejected on the same basis as claims 16-20 respectively. See the discussions regarding claims 16-20 above for the details of this disclosure.

### ***Response to Arguments***

4. Applicants' arguments with respect to claims 1, 3-8, 11-22, 24-26 and 43-47 have been considered but are moot in view of the new ground(s) of rejection.

Referring to applicants' remarks on pages 8-9 regarding the Section 103 rejections of claims 1 and 21: Applicants argued that Malin does not teach or suggest "transferring the updated database information to a remote location" as required by the amendment to these claims.

The examiner disagrees for the following reasons: In light of the amendments to these claims, Malin's shop database (725) is considered to be the claimed "computer database" to which repair status information is periodically updated by electronically transferring the data from a shop terminal (720) to the shop database (725). Malin's platform server (740) having a platform database (750) is a remote location (705) relative to the shop database (725) since it is located across the network (710). Malin's step (930) of synchronizing the platform database (750) with the shop database(s) (725) corresponds to the claimed step of "transferring the updated database information [in shop database 725] to a remote location [to platform database 750]" as claimed. Customers and Third Parties may also search the information at the remote location as claimed. Thus, the combination of Malin and Madden as applied to claims 1 and 21 above obviates the claims, even as amended.

### ***Conclusion***

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5. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. Namely, the U.S. Patent documents made of record are considered particularly pertinent to portions of applicants' claimed invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goddard whose telephone number is 571-272-4020. The examiner can normally be reached on M-F, 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bdg  
4 October 2005



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